Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference 20040175 | FOR FURTHER ACTION | See Form PCT/IPEA/416 | | | | | | |
|--|--|--|--|--|--|--|--|--|
| International application No. | International filing date (day/month/ | year) Priority date (day/month/year) | | | | | | |
| PCT/ES2004/000332 | 13.07.2004 | 23.07.2003 | | | | | | |
| | International Patent Classification (IPC) or national classification and IPC | | | | | | | |
| F25D31/00, A23L3/36, 2/42 | | | | | | | | |
| E23D31/00, R23D3/30, 2/42 | | | | | | | | |
| Applicant CONDE HINOJOSA, Jose Ramón | | | | | | | | |
| | This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. | | | | | | | |
| 2. This REPORT consists of a total of | sheet | sheets, including this cover sheet. | | | | | | |
| 3. This report is also accompanied by Al | NNEXES, comprising: | | | | | | | |
| a. (sent to the applicant and | to the International Bureau) a total o | sheets, as follows: | | | | | | |
| sheets of the descrip | sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative | | | | | | | |
| sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental | | | | | | | | |
| | Box. | | | | | | | |
| b. (sent to the International I | b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) | | | | | | | |
| | , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see | | | | | | | |
| Section 802 of the Administ | | the Supplemental Box Relating to Sequence Listing (see | | | | | | |
| 4. This report contains indications relati | ng to the following items: | | | | | | | |
| Box No. I Basis of the | ∇ | | | | | | | |
| Box No. II Priority | | | | | | | | |
| Box No. III Non-establi | shment of opinion with regard to nove | elty, inventive step and industrial applicability | | | | | | |
| Box No. IV Lack of unit | y of invention | | | | | | | |
| DOX 110. V | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | | | | |
| Box No. VI Certain doc | Box No. VI Certain documents cited | | | | | | | |
| Box No. VII Certain defe | Box No. VII Certain defects in the international application | | | | | | | |
| Box No. VIII Certain obs | Box No. VIII Certain observations on the international application | | | | | | | |
| Date of submission of the demand | Date of comp | letion of this report | | | | | | |
| | | | | | | | | |
| Name and mailing address of the IPEA/ES | Authorized of | Authorized officer | | | | | | |
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| Facsimile No. | Telephone No | Telephone No. | | | | | | |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
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| Box | No. I | Basis of the report | | |
|-----|--|---|--|---|
| 1. | With regar | d to the language, this report is based on the internation | nal application in the languag | e in which it was filed, unless otherwise |
| | indicated u | ender this item. | | |
| | | report is based on translations from the original langua h is the language of a translation furnished for the purp | | e, |
| | | international search (Rule 12.3 and 23.1(b)) | | |
| | | publication of the international application (Rule 12.4) |) | |
| | Ш | international preliminary examination (Rule 55.2 and/ | • | |
| 2. | With regar receiving (this report | d to the elements of the international application, this Office in response to an invitation under Article 14 ar): | report is based on (replacem e referred to in this report a | ent sheets which have been furnished to the s "originally filed" and are not annexed to |
| | the in | nternational application as originally filed/furnished | | |
| | the d | lescription: | | |
| | page | s 1-46 | · <u>·</u> | as originally filed/furnished |
| | page | s* | received by this Authority | on |
| | page | s* | received by this Authority | on |
| | the c | laims: | | |
| | nos. | | | as originally filed/furnished |
| | | • | | |
| | nos.* | | | ether with any statement) under Article 19 |
| | nos.* | | | |
| | nos.* | | received by this Authority | on |
| | the d | trawings: | | |
| | sheet | ts | | as originally filed/furnished |
| | sheet | ts* | received by this Authority | on |
| | sheet | ts* | received by this Authority | on |
| | a seq | quence listing and/or any related table(s) – see Supplem | ental Box Relating to Sequen | ice Listing. |
| 3. | The. | amendments have resulted in the cancellation of: | | |
|] | | the description, pages | | |
| | 一 | the claims, nos. | | |
| | H | | | |
| | H | | | |
| | 님 | - | | |
| | _ ⊔ | | | |
| 4. | This they | report has been established as if (some of) the amend have been considered to go beyond the disclosure as fi | lments annexed to this report led, as indicated in the Suppli | and listed below had not been made, since emental Box (Rule 70.2(c)). |
| | 닏 | the description, pages | | |
| | | the claims, nos. | | |
| | | the drawings, sheets/figs | | |
| | | the sequence listing (specify): | | |
| | | any table(s) related to sequence listing (specify): | | |
| | If item 4 a | pplies, some or all of those sheets may be marked "sup | erseded." | |

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| | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | |
|-------------------------------|---|--|--|--|--|
| Statement | | | | | |
| Novelty (N) | Claims | 1-52 | YES | | |
| | Claims | | мо | | |
| Inventive step (IS) | Claims | 1-52 | YES | | |
| | Claims | | NO | | |
| Industrial applicability (IA) | Claims | 1-52 | YES | | |
| | Claims | | NO | | |
| | Inventive step (IS) | Novelty (N) Claims Claims Inventive step (IS) Claims Claims Claims Claims | Novelty (N) Claims 1-52 Claims Inventive step (IS) Claims 1-52 Claims Industrial applicability (IA) Claims 1-52 | | |

2. Citations and explanations (Rule 70.7)

Document taken into consideration:

D1: WO 97/11327 A (27-03-1997)

The subject matter of the present invention, as set forth in claims 1 to 52, is novel, involves an inventive step and is industrially applicable in the light of the prior art published before the priority date.

The subject matter of the present application relates to a method (claims 1 to 23) and a device (claims 24 to 52) for rapidly cooling bottled beverages by spraying a coolant and washing water onto the surface of the bottle while it is being rotated. The spraying time is computed on the basis of the desired beverage temperature, the temperatures of the coolant and the washing water, and the time coefficient of the bottled beverage. The latter parameter can be calculated on the basis of a series of temperature measurements.

Document D1 (which is the closest prior art) describes a beverage cooling device in which a coolant is sprayed onto the surface of the beverage bottle while it is being

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

rotated, which device includes a coolant collector, supply and return pipes, and a unit for controlling the coolant spraying time and the beverage rotation time (see D1, page 7, lines 5-16). The refrigerant is water at $0~^{\circ}\text{C}$.

The present application differs from D1 firstly in that the temperature of the coolant fluid is variable (in D1 the temperature is a set 0 °C). Furthermore, in the present application the cooling time is dependent on the time coefficient of the bottled beverage, which can be calculated using the same device, unlike in D1. Thirdly, the present application also mentions washing water with a controlled temperature and time. This feature is also absent in D1.

It follows that the subject matter of the present application is novel and involves an inventive step in the light of the closest prior art set forth in D1.